

PATENT**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Vincente Gomez Amor

Serial Number: 10/582,005

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DO NOT ENTER: /B.M./

Title: THREE-WAY STOPCOCK

03/09/2010

Examiner: Matney, Brooke Marie

Art Unit: 3763

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AMENDMENT

This paper is in response to the final Office Action of 02 November 2009 for the above-identified application. The Applicant appreciates the Examiner's thorough examination of the subject application, and requests reconsideration and further examination in view of the following:

- ***Amendments to the Specification***, beginning on page 2 of this paper;
- ***Amendments to the Claims***, in the listing of claims beginning on page 4 of this paper; and
- ***Remarks***, beginning on page 5 of this paper.

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Amendments to the Specification:

Please replace paragraphs [0018]-[0023] of the specification with the following amended paragraphs:

[0018] With reference to FIGS. 1-3, it can be observed how the 3-way stopcock consists of a cylindrical body or nucleus (1) in which the plug or stopper (4) works and where the principal arm or channel (2) and its ~~it's~~ two secondary arms (3,3') meet or converge. Between these three arms they communicate or not depending on the position that the plug (4) adopts, which is operated by health care workers via the handle (5). As stated before, the principal arm (2) is assigned to receive an intravenous catheter (11) placed in the patient, while the secondary arms or channels (3, 3') are assigned to receive other catheters or lines (10,10'), whereupon relating the stopcock of the invention with some containers supplying therapeutic fluids, for example: saline solution, antibiotics or any other equal products.

[0019] According to the present invention, the secondary arms (3, 3') that emerge from the body or nucleus (1) in diametric opposition is each configured such that an ~~characterized because respective trajectories run in each~~ initial segment is curved (3a, 3a') and a prolong in final segment of each segments (3b,3b') ~~which run~~ runs parallel to the principal arm (2). The direction of inclination of the curved segments is toward the patient's shoulder. This way, it prevents the problem of occlusion or blocking ~~ehocking~~ of the secondary arms.

[0020] The means of coupling (6) that is used for connecting the 3-way stopcock to the corresponding catheters ~~[[is]]~~ can be by universal connectors or luer-lock, which are used in medical practice ~~practise~~.

[0021] When the 3-way stopcock is connected to the intravenous catheter properly placed in the patient's forearm (9) according to FIG. 2, the secondary arms (3, 3') present curved. segments (3a, 3a') which avoid accumulation of solids and therefore eliminate the risk of occlusion of its channels.

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By means of the distal segments (3b, 3b') which are the prolongation of the curved segments (3a, 3a') and the catheters (10, 10') remain visibly parallel between themselves and are oriented longitudinally ~~[[in]]~~ along the forearm heading towards the patient's shoulder, that is, in the most ideal position for the catheters (10, 10') connected to the distal segments (3b, 3b') of the secondary arms communicate with the corresponding containers or bottles supplying therapeutic fluids. These bottles usually hang from a support in the form of a "T" placed at the head of the bed. Therefore, in the position in which the stopcock acts, according to the present invention, it turns out to be impossible for said catheters (10, 10') to choke off or kink, thus making difficult or impeding the flow of therapeutic fluids. In addition, the stopcock of the present invention provides for ~~To this advantage it can be added,~~ the non-occlusion of the arms due to the curved portions or segments (3a, 3a') ~~presented in the stopcock of this invention.~~

[0022] The 3-way stopcock present invention is made out of medical grade polymer, this is a polymer resistant to thermal treatment received in sterilization. It does not interact with therapeutic fluids and has to be easy to manipulate, etc. In addition, the initial portions (3, 3') have a high elastic index, which produces a greater capacity to return to its original position. This way, offering provides a stopcock offering ~~which offers~~ greater security for the patient and a higher capacity for manipulation on the part of sanitary personnel.

[0023] ~~[[In]]~~ FIG. 3, ~~it can be observed~~ shows the interior of stopper or plug (4), whereupon ~~appraisal of in which~~ the configuration of the inner channels (4a, 4b) is sensibly in the form of an inverted "V," having ~~being~~ its branches slightly arched so as to permit optimal flow of fluids.

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Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A three-way stopcock for medical use comprising:

a primary arm and two secondary arms meeting at a body, wherein the primary and secondary arms are configured and arranged to receive an intravenous catheter and two supply catheters, respectively; and

a plug disposed within the body, wherein the plug is configured and arranged for being externally activated by a handle;

wherein the principle arm and the secondary arms can be brought to selectively communicate with each other or be disconnected, and wherein the two secondary arms protrude diametrically opposite from the body, wherein the tangent of both arms nearest the body is perpendicular to the principal arm, wherein each secondary arm has (i) a proximal segment adjacent to the body that is curved and flexible, and (ii) a distal segment, wherein the two distal segments can be ~~made configured~~ essentially parallel to each other and the primary arm, wherein and the two proximal segments can be oriented in a direction perpendicular to the principal arm.

2. (Previously Presented) The three-way stopcock according to claim 1, wherein the secondary arms are made of medical grade polymer.

3. (Previously Presented) The three-way stopcock according to claim 1, wherein the plug presents in its interior inner channels an interior configuration in the form of inverted “V”, wherein the branches are slightly arched.

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REMARKS

As noted previously, the Applicant appreciates the Examiner's thorough examination of the subject application.

Claims 1-3 are pending in the subject application and were rejected in the final Office Action mailed 02 November 2009 on various statutory grounds, described in further detail below. Claim 1-is amended herein to clarify Applicant' claimed invention. No new matter has been added.

Applicant requests reconsideration and further examination of the subject application in light of the following remarks.

Specification

Paragraphs [0018]-[0023] are amended herein for grammatical clarity. No new matter has been added.

Claim Rejections – 35 U.S.C. § 102

Claims 1 and 2 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,219,021 to Fink ("Fink"). Applicant respectfully traverses the rejection and requests reconsideration for the following reasons.

A requirement for a rejection under 35 U.S.C. § 102(b) is that the cited reference must teach, inherently or expressly, each and every limitation as arranged in the claim(s) at issue. In this situation, Fink fails to teach all of the limitations as arranged in amended independent claim 1. The stopcock of amended claim 1 includes, *inter alia*, a primary arm and two secondary arms joined at a body "wherein each secondary arm has (i) a proximal segment adjacent to the body that is curved and flexible, and (ii) a distal segment, wherein the two distal segments can be configured essentially parallel to each other and the primary arm, wherein the two proximal segments can be oriented in a direction perpendicular to the principal arm."

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In contrast, Fink teaches a color-coded stop-cock valve for use with intravenous (“IV”) sets, the valve including a valve body having at least two inlets and one outlet adapted to be connected to an IV system, a rotatable valve core formed with passages to interconnect with the inlet and outlet passages in the valve body upon rotation thereof and a valve handle connected to the core. The Fink handle and valve body are marked with distinct color indicia unique to each inlet and outlet so that the position of the valve and flow arrangement can be quickly discerned.

For the rejection, the Office Action (on page 3) states that Fink teaches (i) “each secondary arm has (i) a proximal section that is curved and flexible (col. 3, lines 44-50),” (ii) that “the primary and two secondary arms are each connected to a flexible length of tubing (inlet tube 34, inlet tube 38, and outlet tube 42, Fig. 1),” and (iii) “that the flexible length of tubing can therefore be bent in a way so that the inlet tube curve away from the body and then become aligned parallel to each other.”

In response, Applicant notes that the structures referred to by cited portions of Fink are actually IV tubing and NOT part of the Fink Stopcock. Fink makes this clear: “a flexible length of tubing 34 to a first container of liquid medication” [col. 3, lines 45-46], “a length of flexible tubing 38 to second container of medication” [col. 3, lines 48-49], and “a length flexible tubing to the patient by means of a hollow needle inserted into the patient’s vein and held in place by tape or other means.” [col. 3, lines 51-54]. Clearly, these structures are IV lines and not part of the Fink stopcock structure. Thus, Applicant respectfully submits that the rejection is based on an inaccurate and clearly erroneous characterization of Fink.

At the very least, Fink does not teach (or suggest) the above-noted configuration of the primary and secondary arms as recited in amended claim 1.

Because of the foregoing reasons, Fink forms an improper basis for a rejection of claims 1 and 2 under 35 U.S.C. § 102(b), and Applicant requests that the rejection be removed accordingly.

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Claim Rejections – 35 U.S.C. § 103

Claim 3 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Fink, previously discussed, in view of U.S. Patent No. 7,033,339 to Lynn ("Lynn"). Applicant respectfully traverses the rejection and requests reconsideration for the following reasons. Lynn is directed to Luer access devices for the engagement of conventional Luer lock connectors and systems using penetration of a Luer tip of a Luer lock connector into a septum to achieve access for medical fluid transfer. See, e.g., Lynn, col. 1, lines 16-19. Lynn is not understood as curing the previously-noted deficiencies of Fink relative to amended claim 1. Thus, without acceding to the presence, sufficiency or propriety of the motivation adduced by the Examiner for the rejection, the combination of Fink and Lynn fails to teach or suggest all of the limitations of amended claim 3. Accordingly, Applicant respectfully requests that the rejection of claim 3 be withdrawn.

Conclusion

In view of the amendments and remarks submitted herein, Applicant respectfully submits that all of the pending claims in the subject application are in condition for allowance, and respectfully request a Notice of Allowance for the application. If a telephone conference will expedite prosecution of the application, the Examiner is invited to telephone the undersigned. Authorization is hereby given to charge our deposit account, No. 50-1133, for any fees required for the prosecution of the subject application.

Respectfully submitted,

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